

REMARKS

This Amendment is submitted in reply to the Final Office Action mailed on February 12, 2008. No fee is due in connection with this Amendment. The Commissioner is hereby authorized to charge any fees which may be required or credit any overpayment to Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. 112701-706 on the account statement.

Claims 1-12 and 14-15 are pending. Claim 13 was previously canceled and Claims 6-8, 12 and 14-15 were previously withdrawn. In the Office Action, Claims 1-5 and 9-11 are rejected under 35 U.S.C. §103. In response, Claims 1-3 and 9-11 have been amended. The amendments do not add new matter. In view of the amendments and/or for the reasons set forth below, Applicants respectfully submit that the rejections should be withdrawn.

In the Office Action, Claims 1-5 and 9-11 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Publication No. 2002/0107292 to Bortlik et al. ("*Bortlik*"). Currently amended independent Claims 1, 9, 10 and 11 recite, in part, a natural lycopene concentrate, wherein the concentrate is substantially free of fibers and other insoluble compounds. The amendments do not add new matter. The amendments are supported in the Preliminary Amendment at, for example, page 6, [0036-0040]. Applicants respectfully submit that *Bortlik* fails to disclose or suggest every element of the presently amended claims.

Applicants have found a surprisingly simple process for obtaining a "natural," dispersed water-soluble lycopene that is naturally present in, for example, certain vegetables rich in lycopene/carotenoids such as tomato puree. During the process, dispersed lycopene from, for example, a tomato paste is solubilized under heat and at increased pH levels. The dispersed lycopene may then be separated from the fibers and/or insoluble compounds of, for example, the tomato paste by filtration or decantation. The filtrate recovered is a solution containing dispersed lycopene. Thereafter, the lycopene complexes are acid-precipitated from the filtrate and separated from the soluble material by filtration or centrifugation. After separation, the lycopene complexes are then re-suspended at a neutral pH level and spray dried. See, Preliminary Amendment, page 6, [0036-0040]. As such, the process of the present disclosure is able to provide a relatively simple strategy to take advantage of certain processing steps to induce structure changes of the lycopene. The process is not based on the use of solvents, but rather is based on the pH-dependent "solubility" of lycopene from, for example, tomato paste.

Because the process does not use a solvent, the product is considered completely “natural” and the product is substantially free of fibers, soluble solids and flavors. Further, the “natural” lycopene will have an increased amount of stability toward light, heat and oxygen, and will be water-soluble.

In contrast, Applicants respectfully submit that *Bortlik* fails to disclose or suggest a natural lycopene concentrate, wherein the concentrate is substantially free of fibers and other insoluble compounds as required, in part, by the present claims. Rather, *Bortlik* teaches a lycopene concentrate having modified native characteristics by virtue of being mixed with a solvent. Specifically, *Bortlik* teaches two processes for preparing a lycopene composition, both of which require mixing the lipophilic bioactive compound with a solvent, the solvent preferably being acetone, isopropanol or ethanol. See, *Bortlik*, [0032-0037], [0040] and [0042-0045]. For example, the process in *Bortlik* relates to the complexation of lycopene-rich tomato with whey proteins. In the process, a solvent is first used to dissolve, for example, an oleoresin in a solvent such as, for example, acetone. After dissolution, the lycopene is complexed with the whey protein by admixing the organic phase to an aqueous solution containing the proteins. Thereafter, the organic phase is evaporated and the aqueous phase containing the lycopene is spray dried. See, *Bortlik*, [0032-0045]. At no place in the disclosure does *Bortlik* disclose or even suggest that any fibers or insoluble compounds from the primary composition are filtered out or removed. In fact, the primary composition of *Bortlik* has a relatively high ratio of carrier-active compound. See, *Bortlik*, [0020]. As such, the primary composition of *Bortlik* provides a process that requires organic solvents and has less stability than the presently claimed concentrate.

Therefore, because *Bortlik*, fails to disclose or suggest a natural lycopene concentrate obtained without the use of solvents, wherein the concentrate is substantially free of fibers and insoluble compounds as is required, in part, by the claims, *Bortlik* fails to render obvious the present claims. For at least these reasons, Applicants respectfully submit that *Bortlik* does not render obvious Claims 1-5 and 9-11.

Accordingly, Applicants respectfully request that the obviousness rejections of Claims 1-5 and 9-11 be withdrawn.

For the foregoing reasons, Applicants respectfully request reconsideration of the above-identified patent application and earnestly solicit an early allowance of same. In the event there remains any impediment to allowance of the claims which could be clarified in a telephonic interview, the Examiner is respectfully requested to initiate such an interview with the undersigned.

Respectfully submitted,

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